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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,888	09/30/2003	Jeremy Bem	Google-57 (GP-151-00-US)	9229
26479	7590	11/20/2007	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			NGUYEN, TRI V	
			ART UNIT	PAPER NUMBER
			1796	
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			11/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,888	Applicant(s) BEM, JEREMY	
	Examiner Tri V. Nguyen	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10, 12-17, 19-22, 24-29, 32-35, 37-42, 53, 54, 56-64, 66-71, 74, 75, 77-82 and 85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10, 12-17, 19-22, 24-29, 32-35, 37-42, 53, 54, 56-64, 66-71, 74, 75, 77-82 and 85 is/are rejected.
- 7) ☒ Claim(s) 62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In the amendment filed on 03/16/07, claims 7, 12, 13, 19, 24, 25, 32, 37, 38, 53, 56, 57, 63, 66, 67, 74, 77 and 78 have been amended and claims 1-6, 11, 18, 23, 30, 31, 36, 43-52, 55, 65, 72, 73, 76, 83, 84 and 86 have been cancelled. The currently pending claims considered below are Claims 7-10, 12-17, 19-22, 24-29, 32-35, 37-42, 53, 54, 56-64, 66-71, 74, 75, 77-82 and 85.
2. Upon review of the amendment dated 03/16/07 and the statement of common ownerships dated 10/16/07, the rejections based on the Weissman et al. (US 6,816,857) reference are withdrawn.

Claim Objections

3. Claim 62 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 62 is directed to the apparatus of claim 53; however, claim 53 is already an apparatus claim. Furthermore, claim 62 has the wrong modifier as the claim has been amended.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 62 recites "the apparatus of claim 53" in line 1; however, there is a discrepancy as the claim seems to be missing a further limitation. It is unclear as to the scope of the claim.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 7-10, 12, 13, 19-22, 24, 25, 32-35, 37, 38, 53, 54, 56, 57, 62-64, 66, 67, 74, 75, 77, 78 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorosario et al. in view of Weissman et al. (US 6,453,315) and McElfresh et al.

Claims 7, 19 and 32: Dorosario et al. discloses a method comprising:

- a) accepting search query information including a word (page 3, parag. 27);
- b) determining one or more words related to the word included in the accepted search query (page 4, parag. 41 and page 5, parag. 42-43);
- c) generating an item request including
 - i) the word included in the accepted search query (page 4, parag. 41 and page 5, parag. 42-43), and
 - ii) the one or more words determined to be related to the word included in the accepted search query (page 4, parag. 36, 41 and page 5, parag. 42-43);
- d) retrieving items using the item request (page 8, parag. 66);
- e) determining a score for each of the retrieved items (page 3, parag. 28);

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f) adjusting the scores of any items retrieved on the basis of the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query (page 5, parag. 44);

g) serving at least some of the items to a client device for rendering to a user, wherein the serving is controlled, at least in part, using the adjusted scores,

wherein the retrieved items are advertisements but does not explicitly disclose wherein the act of determining a score for each of the retrieved items uses at least one of ad performance information and ad price information.

Dorosario et al. disclose a method of delivering advertisement based on a search query however, Dorosario et al. does not explicitly disclose applicants' search architecture and determining a score for each of the retrieved items uses at least one of ad performance information and ad price information. In an analogous art, Weissman et al. disclose appellants search architecture based on words relationships and score adjustments (col 7, lines 41-49; col 8, lines 8-22; col 9, lines 42-67; col 10, lines 42-54; col 13, lines 35-65 and Figure 3) and McElfresh et al. teach that it is known to track the performance of the ads displayed and further use the performance data as factors in a statistical model in targeted advertising (col 5, lines 66 to col 6, line 14; col 8, lines 15-28 and col 11, lines 34 to 67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Weissman et al., with the particular search architecture and score adjustment feature based on ad performance information as taught by Weissman et al. and McElfresh et al. One would have been motivated to modify the method to increase the efficiency in the targeting of the advertisement by incorporating an adjustment based on the prior interaction of the users with the ads.). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as

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taught by Dorosario et al., Weissman et al. and McElfresh et al. with the adjusting being solely based on the one or more words determined to be related to the word included in the accepted search query relative to any items retrieved on the basis of the word included in the accepted search query since it was known in the art that different schemes of advertising utilizing an assortment of features are used to provide a specific scope in the targeted audience sought by the advertiser such as the criteria included in broadening and/or restricting the reach of the targeted advertisement in view of the search results. The claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of a skilled artisan.

Claims 8, 20 and 33: Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of 7, 19 and 32 but do not explicitly disclose wherein the act of adjusting the scores includes decreasing the scores. Weissman et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of decreasing the score is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Dorosario et al., Weissman et al. and McElfresh et al. to include a step of decreasing the score. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted (via a numerical increase or decrease of the updated score with reference to the "un-updated" score).

Claims 9, 21 and 34: Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of claims 7, 19 and 32 but do not explicitly disclose wherein the act of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. Weissman

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et al. teach ranking the results and ordering based on relevance (col 7, lines 45-49). The instant limitation of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one is seen as a design decision which is given little, if any, patentable weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Dorosario et al., Weissman et al. and McElfresh et al. to include a step of adjusting the scores includes multiplying each of the scores by a multiplier that is less than one. One would have been motivated to allow for the modification of the method to include a way to reflect the score being adjusted.

Claims 10, 22 and 35: Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of claims 9, 21 and 34 but do not explicitly disclose further comprising:

h) updating the multiplier using performance information. Weissman disclose the feature of updating the score. Dorosario et al. disclose a performance feature in a search engine and weighing factors (page 5, parag. 44 and page 7, parag. 63). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Dorosario et al., Weissman et al. and McElfresh et al., with the performance feature. One would have been motivated to modify the method to expand on the semantic space criteria with an additional dimension thus increasing the number of pertinent information to optimize the effectiveness of advertisement matching.

Claims 12, 24 and 37 Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of claims 10, 22 and 35 disclose wherein the performance information includes ad selection information (Dorosario et al.: page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63).

Claims 13, 25 and 38: Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of 10, 22 and 35 disclose wherein the performance information includes ad conversion information (Dorosario et al.: page 4, parag. 35).

Claims 53, 54, 56, 57, 62-64, 66, 67, 74, 75, 77, 78 and 85 disclose the apparatus of the method Claims 7-10, 12, 13, 19-22, 24, 25, 32-35, 37, 38 respectively; therefore, the prior arts of Dorosario et al., Weissman et al. and McElfresh et al. as set forth above are relied upon to reject Claims 53, 54, 56, 57, 62-64, 66, 67, 74, 75, 77, 78 and 85.

7. Claims 14-17, 26-29, 39-42, 58-61, 68-71, 79-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman et al. and Dorosario et al. as applied to the claims above, and further in view of Hosea et al. (2002/0059094).

Claim 14, 26 and 39: Dorosario et al., Weissman et al. and McElfresh et al. disclose the method of claims 10, 22 and 35 respectively but do not explicitly disclose wherein the act of updating the multiplier is performed using a function that causes the updated multiplier to converge to observed user behavior relevant to performance divided by predicted user behavior relevant to performance. In an analogous art, Hosea et al. teaches that it is known to use an adaptive profiling algorithm starting with an educated guess (the zip code of the user) and evolving as more information is available about the user (page 4, parag. 43 and 44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Dorosario et al., Weissman et al. and McElfresh et al., with the adaptive profiling feature as taught by Hosea et al. One would have been motivated to modify the method with an adaptive profiling algorithm for providing a more efficient targeted

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advertising strategy by incorporating pertinent information about the user thus increasing the effectiveness of ad matching.

Claims 15, 27 and 40: Dorosario et al., Weissman et al., McElfresh et al. and Hosea et al. disclose the method of claims 10, 22 and 35 respectively but do not explicitly disclose wherein the act of updating the multiplier is performed using the formula:

$$\text{updated_multiplier} = (N \times \text{initial multiplier} + \text{observed_user_behavior}) / (N + \text{naively_predicted_user_behavior})$$

wherein N is a number.

In an analogous art, Hosea et al. teaches that it is known to use an adaptive profiling algorithm starting with an educated guess (the zip code of the user) and evolving as more information is available about the user (page 4, parag. 43 and 44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Dorosario et al., Weissman et al. and McElfresh et al. and Hosea et al., with the adaptive profiling feature as taught by Hosea et al. One would have been motivated to modify the method with an adaptive profiling algorithm for providing a more efficient targeted advertising strategy by incorporating a greater number of pertinent information about the user thus increasing the effectiveness of advertisement matching.

Claims 16, 28 and 41: Dorosario et al., Weissman et al., McElfresh et al. and Hosea et al. disclose the method of claim 15, 27 and 40 respectively but do not explicitly disclose wherein the user behavior is selection. Dorosario et al. disclose an ad selection feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63).

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Claims 17, 29 and 42: Dorosario et al., Weissman et al., McElfresh et al. and Hosea et al. disclose the method of claim 15, 27 and 40 respectively but do not explicitly disclose wherein the user behavior is conversion. Dorosario et al. disclose an ad conversion feature (page 4, parag. 35; page 5, parag. 44 and page 7, parag. 63).

Claims 58-61, 68-71 and 79-82 disclose the apparatus of the method Claims 14-17, 26-29 and 39-42 respectively; therefore, the prior arts of : Dorosario et al., Weissman et al., McElfresh et al. and Hosea et al. as set forth above are relied upon to reject Claims 58-61, 68-71 and 79-82.

Response to Arguments

8. Applicant's arguments with respect to claims 7-10, 12-17, 19-22, 24-29, 32-35, 37-42, 53, 54, 56-64, 66-71, 74, 75, 77-82 and 85 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri V. Nguyen whose telephone number is (571) 272-6965. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM.

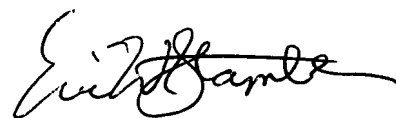
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119 and Vasu Jagannathan can be reached on (571) 272-1119 and Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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